We claim:

1. A method of forming an electronic lens, comprising the steps of:

forming a lens with a layer of inhomogeneous liquid crystal droplet(LC) sizes;

passing a beam of light through the layer; and

tuning a refractive index profile of the light beam passing through the lens with a source of voltage.

2. The method of claim 1, wherein the step of forming the lens includes the step of:

forming a negative lens.

3. The method of claim 2, wherein the step of forming the negative lens includes the step of: applying sizes of the LC droplets which gradually decrease from a center area of the layer to side edges of the layer.

4. The method of claim 1, wherein the step of forming the lens includes the step of:

forming a positive lens.

5. The method of claim 4, wherein the step of forming the positive lens includes the step of: applying sizes of the LC droplets which gradually increase from a center area of the layer to side edges of the layer.

6. The method of claim 1, wherein the step of tuning, includes step of:

applying a uniform voltage to the layer of the LC droplets for the tuning of the refractive index profile of the lens.

7. The method of claim 1, wherein the LC droplets include:

nano-scale polymer-dispersed droplets.

8. The method of claim 1, further comprising the step of:

forming an array of the lens for broadband beam steering.

9. The method of claim 1, further comprising the step of:

forming a Fresnel lens by using a circular zoned patterned mask.

10. The method of claim 1, further comprising the step of:

forming a prism from the lens.

11. The method of claim 10, wherein the step of forming the prism includes the step of:

forming a switchable prism by splitting a middle pixel.

12. The method of claim 10, further comprising the step of:

forming an optical phased array of prisms for broadband beam steering.

13. The method of claim 1, further comprising the step of:

focusing at least one eyeglass lens.

14. The method of claim 1, further comprising the step of:

focusing a zoom lens on a camera.

15. A method of fabricating an inhomogeneous layer of liquid crystal(LC) droplets, comprising the steps of:

forming a patterned photo mask;

positioning a liquid crystal(LC) layer on one side of the masksubstrates;

applying Ultra-Violet(UV) light to a second side of the mask; and

forming an inhomogeneous layer of liquid crystal (LC) droplets with the applied ultraviolet light.

16. The method of fabricating of claim 15, further comprising the step of:

forming a lens with the photomask.

17. The method of fabricating of claim 16, wherein the step of forming the lens includes the step of: forming a negative lens.

18. The method of fabricating of claim 16, wherein the step of forming the lens includes the step of: forming a positive lens.

19. The method of fabricating of claim 15, further comprising the step of:

forming a prism with the photomask.

20. The method of fabricating of claim 19, wherein the step of forming the prism includes the step of: forming a prism with the photo mask.

21. The method of fabricating of claim 15, further comprising the step of:

forming a Fresnel lens.

22. The method of fabricating of claim 21, wherein the step of forming the fresnal lens includes the step of: forming the Fresnel lens with a circular zoned patterned mask.

23. The method of fabricating of claim 15, wherein the step of supporting, includes the step of: supporting polymer dispersed liquid crystal layer.

24. The method of fabricating of claim 23, wherein the step of forming the lens includes the step of: forming nano-scale size droplets in the polymer dispersed liquid crystal layer.

25. A tunable lens, comprising:

an inhomogeneous layer of liquid crystal droplets;

means for passing a light source through the layer; and

means for tuning the layer to form the tunable lens.

26. The tunable lens of claim 25, wherein the inhomogeneous layer includes: nano-scale size liquid crystal droplets.

27. The tunable lens of claim 26, wherein the inhomogeneous layer includes: polymer-dispersed liquid crystal droplets.

28. The tunable lens of claim 25, wherein the tunable lens includes: a negative lens.

29. The tunable lens of claim 28, wherein the negative lens includes:

sizes of the liquid crystal droplets which gradually decrease from a center of the layer to side edges of the layer.

30. The tunable lens of claim 25, wherein the lens includes: a positive lens.

31. The tunable lens of claim 30, wherein the positive lens includes:

sizes of the liquid crystal droplets which gradually increase from a center of the layer to side edges of the layer.

32. The tunable lens of claim 25, further comprising:

means for using the lens in an array for beam steering.

33. The tunable lens of claim 25, further comprising:

means for using the lens as a Fresnel lens.

34. The tunable lens of claim 25, further comprising:

means for using the lens as a prism.

35. The tunable lens of claim 25, further comprising:

an array of the lens.

36. The tunable lens of claim 25, further comprising:

means for beam steering the lens.

37. The tunable lens of claim 25, further comprising:

means for tuning at least one lens of a pair of eyeglasses with the lens.

38. The tunable lens of claim 25, further comprising:

means for attaching the lens to a camera for use as a zoom lens.